**K-5 Math Lesson Plan**

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| **Teacher: Johnson/Marble** | | | **Grade: 3** | | | **Date(s)**: 8/28/12 |
| **Unit Title:**  Unit 1- Place Value with Addition and Subtraction within 1,000. | | | | **Corresponding Unit Task:**  Taught prior to Performance Task 1; ***This lesson will mainly focus on place value.*** | | |
| **Essential Question(s):**  How can I represent a number? How does place value help me determine the value of a digit? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  -Pictures of a family reunion.  -Overhead base 10 blocks  -Copies of “Place Value Through  Digit”  -Index cards, #0-9 | | **Student:**  **-**Copies of the place value chart.  -Base 10 blocks-  -Note books for note taking and to complete pg.7  -Copies of “Display the Digit” and  -Number tiles 0-9 | | | place value, Thousand(s)-Cubes, hundred(s)-flats, ten(s)-rods/longs, one(s)-units, value, digit | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  x 1. Make sense of problems and persevere in solving them.  x 2. Reason abstractly and quantitatively.  x 3. Construct viable arguments and critique the reasoning of others.  x 4. Model with mathematics.  x 5. Use appropriate tools strategically.  x 6. Attend to precision.  x 7. Look for and make use of structure.  x 8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  **3.NBT.2** Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. | | | | | |
| **I Can Statement(s):**  -I can use base-ten blocks appropriately.  -I can represent whole numbers using base-ten blocks.  -I can locate place value within whole numbers.  -I can determine the value of a digit in a whole number. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  Introduce the Unit’s Engaging Learning Experience\*. Students will gather on the carpet for this discussion.  *You have been hired by the Smith Family to plan their Labor Day family reunion. The family would like for you to choose the location, food, and party favors for 25 family members. Your challenge is to create a party proposal with a budget of $1,000. You must present your plan to Mrs. Smith (Grandmother) for approval.*  (Introduced after giving the pre-assessment)  After reading the Unit’s Engaging Learning Experience, we will discuss the vocabulary in the introduction: Family Reunion, Location, Party Favors, Proposal, Budget, and Approval. After creating a chart with the vocabulary and meanings, we will discuss comprehension components of the ELE\*. Hold up and show pictures of the family reunion.  -*What is the Smith Family doing?*  *-What is their goal, what do they want to accomplish?*  *-What is your role in solving this problem?*  *-Brainstorm a list of math skills you may need in completing this task.* | | | | | |
| **Teacher Directed:**  Once we are finished discussing the ELE\*, students will “Stop and give me five” and head back to their seats. We will now introduce the base-10 blocks and discuss their value and  review their names. http://www.learner.org/courses/learningmath/number/images/session5/5_divisibility.gif  We will have the below chart visible for students to see on the white board. We complete this chart together, displaying the base 10 blocks for each example. (Hold up 1 cube, ask students to determine value and record answer- 1,000, on chart) Continue to fill out entire chart.   |  |  |  |  | | --- | --- | --- | --- | | **Cube** | **Flat** | **Rod** | **Unit** | | 1 Cube = 1,000 | 1 flat = | 1 rod = | 1 unit = | | 2 Cubes = | 2 flats = | 2 rods = | 2 units = | | 5 Cubes = | 5 flats = | 5 rods = | 5 units = | | 10 Cubes = | 10 flats = | 10 rods = | 10 units = |   We model how to use base 10 blocks to create the number 23. (Show 2 rods/longs and 3 units on the overhead). We will repeat this with 46, 781, and 1,489. We will then give three examples for students to display on their own with shoulder buddy. (54, 378, 5,652) We will draw examples of the cube, flat, rod and unit as displayed in Envisions Topic 1, they will practice drawing using the teacher and text examples. After practicing drawing these, we will then ask students to represent these as a drawing and then we will walk around to assess students’ progress and make note of those that need additional help. (Conference with individuals that need help) Paper copies of the place chart will be given to each student to practice place values and values of given digits during the guided practice.  http://data3.teacherspayteachers.com/item/Base-Ten-Blocks-Work-Mats-and-Printables/original-90154-2.jpg | | | | | |
| **Guided Practice:**  We will provide the following numbers on the overhead: 52; 638; 1,386; 248. For each given number, have students place the base block manipulatives into the correct column on the place value chart and then draw the example underneath the models. The teacher will walk around to check student accuracy. The teacher will pull numbered popsicle sticks to utilize randomized calling and ask the following questions:  *-What is the place value of the 52?*  *-What is the value of the 5 in the 52?*  *-What is the place value of the 8 in 638?*  *-What is the value of the 6 in 638?*  *-What is place value of the 1 in 1,386?*  *-What is the value of the 1 in 1,386?*  *-What is the value of the 8 in 1,386?*  *-What is the place value of the 6 in 1,386?*  *-What is the place value of the 2 in 248?*  *-What is the value of the 4 in 248?* | | | | | |
| **Independent Practice:**  Students will complete page 7, #8-21 Independent Practice in the Envisions text book. Teacher is walking around, conferencing and assessing student understanding while students are working independently. After students complete page 7, they will play the activity “Display the Digits” from Envisions Topic 1 with a partner. During this time the teacher will pull a small group of students that need remediation from observation taken throughout this lesson. | | | | | |
| **Closing/Summarizing Strategy:**  Teacher will display the number 2,412. The students will be asked to quickly journal everything they know about this number regarding place value. They will share with their tables and nominate a representative to present one strategy that was learned today. We will close by re-reading today’s vocabulary and essential questions. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| For students who can be challenged, they will complete NC Indicator **1.01 F** | | | The teacher will complete “Place Value Through Thousands” from Envisions with the remediation group. | | | Students needing vocabulary help will match Base 10 block pictures the corresponding name and value.  [http://www.fuelthebrain.com/Printable/samples/2_1.jpg](http://www.fuelthebrain.com/Printable/detail.php?ID=3) |
| **Assessment(s):**  Teacher should collect work from Pg. 7 from Envisions text book and teacher observations throughout lesson.  Reflect upon written notes from teacher observations and questioning (Specific student responses- understandings and misconceptions) | | | | | | |
| **Teacher Reflection:** (Next steps?)  -How was time managed?  -What went well?  -Does anything need to be changed for future lessons?  -Which students will need continued extension and remediation? | | | | | | |